

In the Claims:

Please enter the following amended claim set:

1. **(Original)** A method of treating water comprising the steps of:

 exposing water desired to be treated to ozone in sufficient quantity to reduce
a concentration of undesired microorganisms therein;

 flowing the water over a colony of attached algae to remove undesired matter
therefrom;

 stopping the water flow;

 harvesting the algal colony, leaving a colony base;

 adding a pesticide to the colony base to detoxify the colony base;

 permitting the pesticide to achieve substantial detoxification; and

 detoxifying the pesticide.

2. **(New)** A method of treating water comprising the steps of:

 exposing water desired to be treated to ozone in sufficient quantity to oxidize
nutrients therein to a form amenable to bioassimilation by a colony of attached algae, the
ozone in a form for optimizing contact with components in the water; and

 flowing the water over a flowway comprising attached algae to remove the
oxidized nutrients therefrom, the algae experiencing an enhanced photosynthetic activity
upon bioassimilation of the oxidized nutrients.

3. **(New)** The method recited in Claim 2, further comprising the steps of:

 generating ozone gas; and

dissolving the ozone in the water to achieve optimization of contact with the water components.

4. **(New)** The method recited in Claim 2, further comprising the steps of:
generating ozone gas; and
breaking the ozone into small bubbles to achieve optimization of contact with the water components.

5. **(New)** The method recited in Claim 2, wherein the exposing step comprises one of mixing the ozone and the water in a mixing chamber and using a mixing pump to mix the ozone and the water.

6. **(New)** The method recited in Claim 2, wherein the exposing step comprises mixing ozone into water to be treated in a covered enclosure, and further comprising the step of preventing unassimilated ozone from escaping from the enclosure.

7. **(New)** The method recited in Claim 2, wherein the exposing step comprises mixing ozone into water in a subsurface tank using a high-pressure injector.

8. **(New)** A method of increasing an effectiveness of a floway comprising a colony of attached algae comprising the steps of:
exposing water desired to be treated to ozone in sufficient quantity to destroy periphyton-consuming microinvertebrates and eggs thereof;

flowing the water over the flowway to remove undesired microorganisms therein, the algae effectiveness improved in the absence of the periphyton-consuming microinvertebrates and eggs thereof.

9. (New) A method of treating water comprising the steps of:

exposing water desired to be treated to ozone in sufficient quantity to oxidize nutrients therein to a form amenable to bioassimilation by a colony of attached algae, the ozone in a form for optimizing contact with components in the water;

flowing the water over a flowway comprising attached algae to remove the oxidized nutrients therefrom; and

exposing water exiting the flowway to ozone in sufficient quantity to further purify the water.

10. (New) A system of treating water comprising:

an ozone generator;

a mixing chamber for exposing water desired to be treated to ozone in sufficient quantity to reduce a concentration of undesired microorganisms therein;

means for channeling the water to be treated into the mixing chamber and for introducing the generated ozone into water in the mixing chamber;

a colony of attached algae adapted to remove undesired matter from the ozonated water;

means for channeling ozonated water from the mixing chamber to the algal colony;

a harvester for harvesting the algal colony, leaving a colony base; and
means for adding a pesticide to the colony base to detoxify the colony base.

11. (New) A system of treating water comprising:

an ozone generator;

a mixing chamber for exposing water desired to be treated to ozone in sufficient quantity to oxidize nutrients therein to a form amenable to bioassimilation by a colony of attached algae, the ozone in a form for optimizing contact with components in the water;

means for channeling water to be treated into the mixing chamber and for introducing generated ozone into the water to be treated in the mixing chamber;

a floway comprising attached algae adapted to remove the oxidized nutrients therefrom, the algae experiencing an enhanced photosynthetic activity upon bioassimilation of the oxidized nutrients; and

means for channeling ozonated water from the mixing chamber onto the floway.

12. (New) The system recited in Claim 11, further comprising means for dissolving the ozone in the water to achieve optimization of contact with the water components.

13. (New) The system recited in Claim 11, further comprising means for breaking the ozone into small bubbles to achieve optimization of contact with the water components.

14. (New) The system recited in Claim 11, wherein the mixing chamber comprises a covered enclosure, and further comprising means for preventing unassimilated ozone from escaping from the enclosure.

15. (New) The system recited in Claim 11, wherein the mixing chamber comprises a subsurface tank, and further comprising a high-pressure injector positioned to inject generated ozone into water to be treated in the subsurface tank.

16. (New) The system recited in Claim 11, further comprising:
a second mixing chamber for exposing water exiting the floway to ozone is sufficient quantity to further purify the water; and
means for channeling water from the floway to the second mixing chamber.

17. (New) A system of increasing an effectiveness of a floway comprising a colony of attached algae comprising the steps of:
an ozone generator;
a mixing chamber for exposing water desired to be treated to generated ozone in sufficient quantity to destroy periphyton-consuming microinvertebrates and eggs thereof;
means for channeling water to be treated into the mixing chamber and for injecting generated ozone into the water to be treated;

a flowway to remove undesired microorganisms therein, the algae effectiveness improved in the absence of the periphyton-consuming microinvertebrates and eggs thereof; and

means for channeling ozonated water from the mixing chamber onto the flowway.

18. (New) The system recited in Claim 17, further comprising:

a second mixing chamber for exposing water exiting the flowway to ozone is sufficient quantity to further purify the water; and

means for channeling water from the flowway to the second mixing chamber.